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# Patent Abstracts of Japan

PUBLICATION NUMBER : 56118273  
PUBLICATION DATE : 17-09-81

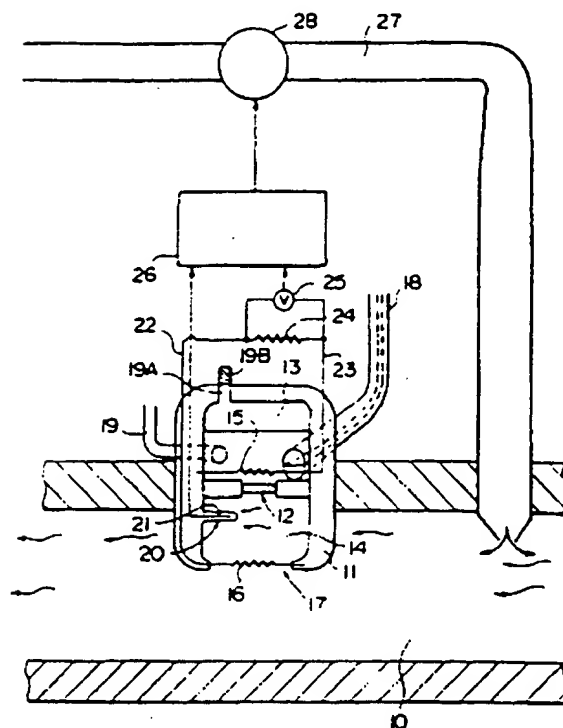
APPLICATION DATE : 20-02-80  
APPLICATION NUMBER : 55020017

APPLICANT : NISSAN MOTOR CO LTD;

INVENTOR : NAKAMURA MASASHI;

INT.CL. : H01M 8/04

TITLE : CONCENTRATION SENSOR FOR FUEL CELL



**ABSTRACT :** **PURPOSE:** To enable accurate measurement of the fuel concentration of a fuel cell, by introducing electrolyte of a measured fuel cell into another fuel cell of a small capacity, detecting the fuel concentration and the temperature of the electrolyte introduced, being followed by correcting the concentration detecting signal according to the temperature detecting signal.

**CONSTITUTION:** A body 11 is partitioned with a diaphragm 12 into an air-electrode chamber 13 and a fuel-electrode chamber 14, where an air electrode 15 and a fuel electrode 16 are located in parallel to one another. Electrolyte of a measured liquid-fuel cell which contains fuel is introduced into the fuel-electrode chamber 14 through an opened inlet 17 facing to introduction path 10. The temperature of the measured electrolyte introduced into the fuel-electrode chamber 14 is always detected by either a thermocouple or thermistor 21 which is installed within a projection 20 protruding toward the fuel-electrode chamber. A great resistance 24, the voltage across which is measured as an output signal of a sensor by a voltmeter 25, is connected to between the fuel electrode 16 and the air electrode 15 by means of lead wires 22 and 23.

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